

REMARKS

The application has been reviewed in light of the Office Action dated June 5, 2003. Claims 1-28 are pending in this application. It is submitted that no new matter has been added and no new issues have been raised by the present Request.

Applicant wishes to bring to the Examiner's attention that it appears that a copy of the reference "GDSA an X.500 Directory Implementation Supporting Heterogeneous Databases" by C.M.R. Leung (Leung) presently on file, erroneously includes copies of the drawings from Applicant's corresponding co-pending PCT application. The Leung reference should include only pages 85-90. An Information Disclosure Statement correcting the error and a new copy of the Leung reference are being filed concurrently herewith.

Claims 1-12, 14-17 and 22-28 were rejected under 35 U.S.C. §102(b) as allegedly anticipated by "GDSA: An X.500 Directory Implementation Supporting Heterogeneous Databases – 1991" (Leung). Claims 13 and 18-21 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Leung. Applicant has carefully considered the Examiner's comments and the cited art, and respectfully submits that amended independent claims 1, 8, 13, 14, 18 and 22 are patentable over the cited art, for at least the following reasons.

Independent claim 1 relates to a method of arranging data in a database comprising creating a first table adapted for storing the data and having one row for each data entry and creating a second table adapted for storing *data components*, including and having one row for each component of data.

Leung, as understood by the Applicant, relates to an X.500 directory implementation supporting heterogeneous databases and describes a DIT table and a single ENTRY table (See

Leung, page 88, lines 14-16) holding detailed information about each directory object. The DIT table is described as a table holding information of the structure of the DIT with each record containing the system identifier of an object, that of its parent, and a coded RDN. The ENTRY table is the single table in Leung described as the table containing information about each directory object, with each record holding the system identifier of an object, and an attribute type of the object in normalized and raw forms. (See Leung, page 88, lines 17-19).

However, as understood by Applicant, Leung does not teach or suggest a method of arranging data in a database comprising creating a second table adapted for storing data components and having one row for each component of data, as recited in independent claim 1. Accordingly, Applicant finds no teaching or suggestion in Leung of a method of arranging data in a database comprising, creating a first table adapted for storing data and having one row for each data entry, and creating a second table adapted for storing data components and having one row for each component of data. For at least these reasons, Applicant submits independent claim 1 and dependent claims 2-7 are patentably distinct from Leung. Independent claim 14 and dependent claims 15-17 are believed to be patentably distinct for at least similar reasons.

Independent claim 8 relates to a database having a data storage arrangement comprising, a search table containing at least one row having a plurality of columns, and a subsearch table containing at least one row having a plurality of columns including a component identifier column. For example, according to an embodiment disclosed at page 9, lines 21-23 of the present disclosure, a subsearch table may utilize an index in order to enable faster, more efficient searching (See page 9, lines 21-23). Of course, Applicant's claims are not limited to the disclosed embodiments.

As understood by the Applicant, in Leung an ENTRY table holds the system identifier of an object and an attribute value of an attribute type of the object in both normalized and raw forms. However, Leung is not understood to teach or suggest a subsearch table containing at least one row having a plurality of columns including a component identifier column. Accordingly, Applicant finds no teaching or suggestion in Leung of a database having a data storage arrangement comprising, a search table containing at least one row having a plurality of columns, and a subsearch table containing at least one row having a plurality of columns including a component identifier column. For at least these reasons, Applicant submits independent claim 8 and dependent claims 9-12 are patentably distinct from Leung. Independent claim 14 and dependent claims 15-17 are believed to be patentably distinct from Leung for at least similar reasons. Independent claim 22 and dependent claims 23-28 are also believed to be patentably distinct for at least similar reasons.

Independent claim 13 relates to a database having a data storage arrangement comprising, a first table directed to a hierarchy which defines a relationship between objects and configured to have one row per object, a second table directed to objects which define one or more values within each object and configured to have one row per value, and a third table directed to one or more selected components of values and configured to have one row for each component of each value.

In contrast, Leung, as understood by Applicant, relates to two relational tables, a DIT table, which holds the information of the structure of the DIT and an ENTRY table, which holds detailed information about each directory object. However, as understood by Applicant, Leung is not understood to teach or suggest a database having a data storage arrangement comprising a third table directed to one or more selected components of values and configured to have one row for each component of each value, as recited in independent claim 13. For at least these reasons, Applicant

respectfully submits that independent claim 13 is patentable over Leung. Independent claim 18 and dependent claims 19-21 are believed to be patentable for at least similar reasons.

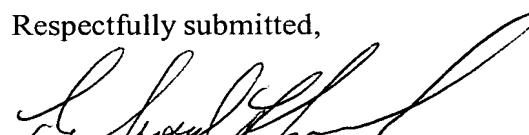
The Office is hereby authorized to charge any additional fees which may be required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition, and the Commissioner is authorized to charge the requisite fees to our deposit account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Entry of this amendment and allowance of this application are respectfully requested.

Respectfully submitted,



RICHARD F. JAWORSKI  
Reg. No. 33,515  
Attorney for Applicant  
Cooper & Dunham LLP